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Assistant Commissioner for Patents
Washington, D.C. 20231

On 23 Oct. 2001

TOWNSEND and TOWNSEND and CREW LLP

By: Malinda Dogit

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Charles S. Zuker
Javier Vinos

Application No.: 09/463,733

Filed: June 12, 2000

For: METHOD FOR MODULATING G-
PROTEIN COUPLED RECEPTORS

Examiner: Scott W. Houtteman

Art Unit: 1656

AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action mailed April 23, 2001, please amend the above-identified application as set forth below. Enclosed herewith is a fee authorization to extend the time for response for three months from July 23, 2001 to October 23, 2001.

IN THE CLAIMS:

Please replace claims 1, 15, 24, 33, and 37 with the following clean versions of the amended claims. A marked up copy showing the amendments is attached hereto as Appendix A.

1. (amended) A method of screening *in vitro* for modulators of

RDGC GPCR phosphatase activity, the method comprising the steps of:

S 30

(i) providing a sample comprising a G-protein coupled receptor and an RDGC phosphatase;

A 1

(ii) contacting the sample with a test compound suspected of having the ability to modulate RDGC GPCR phosphatase activity; and

A 2

(iii) detecting RDGC GPCR phosphatase activity in the sample.

S 30

15. (amended) A method of screening *in vivo* for modulators of RDGC GPCR phosphatase activity, the method comprising the steps of:

A 2

(i) providing a sample comprising rhodopsin and RDGC phosphatase;

(ii) contacting the sample with a test compound suspected of having the ability to modulate RDGC GPCR phosphatase activity; and

(iii) detecting RDGC GPCR phosphatase activity in the sample.

S 30

24. (amended) A method of screening *in vivo* for modulators of RDGC GPCR phosphatase activity, the method comprising the steps of:

A 3

(i) providing an animal comprising a cell comprising a G-protein coupled receptor and an RDGC phosphatase;

(ii) contacting the animal with a test compound suspected of having the ability to modulate RDGC GPCR phosphatase activity; and

(iii) detecting RDGC GPCR phosphatase activity in the animal.

S 30

33. (amended) A method of screening *in vivo* for modulators of RDGC GPCR phosphatase activity, the method comprising the steps of:

A 4

(i) providing an animal comprising a cell comprising rhodopsin and RDGC phosphatase;

(ii) contacting the animal with a test compound suspected of having the ability to modulate RDGC GPCR phosphatase activity; and

(iii) detecting RDGC GPCR phosphatase activity in the animal.

37. (amended) A kit for screening for modulators of RDGC GPCR phosphatase activity, the kit comprising:

(i) a container holding a G-protein coupled receptor and RDGC phosphatase, wherein the RDGC phosphatase has GPCR phosphatase activity; and ;
(ii) instructions for assaying for RDGC GPCR phosphatase activity.

REMARKS

Claims 1-38 are pending in the application.

With entry of the instant amendment claims 1, 15, 24, 33, and 37 have been amended to recite screening for modulators of RDGC GPCR phosphatase activity. This amendment adds no new matter. Support can be found, e.g., in the specification at page 11, lines 9-15, which defines modulators of G-protein coupled receptor signal transduction as referring to activating or inhibitory molecules identified using assays for RDGC phosphatase activity.

For convenience, the rejections are addressed in the order presented in the Office Action dated April 23, 2001.

1. Rejections under 35 U.S.C. § 112, second paragraph

Claims 1-38 were rejected as allegedly indefinite in the recitation of a method of screening (*in vitro* or *in vivo*) for modulators of G-protein coupled receptor signal transduction. Although Applicants disagree, as a modulator of GPCR signal transduction is clearly defined in the specification, in order to expedite prosecution, the claims have been amended to recite a method of detecting a modulator of RDGC GPCR phosphatase activity. Applicants therefore request withdrawal of the rejection.

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2. Rejections under 35 U.S.C. §103

Claims 1-38 were rejected as allegedly unpatentable over Vinos *et al.* (*Science* 277:687-690, 1996). The rejection is respectfully traversed.

Applicants note that the publication date of the Vinos *et al.* is 1997, not 1996. The article is in the August 1, 1997 issue of *Science*. As indicated on page 614 of that issue (attached as Appendix B), *Science* is published weekly on Friday. Friday, August 1, 1997 is therefore the publication date of the issue. The current application is a 35 U.S.C. § 371 national phase application of PCT application PCT/US98/15717 filed July 29, 1998, which claims priority to U.S. Application Nos: 60/054,165, filed July 30, 1997 and 60/054,492, filed August 1, 1997. Vinos *et al.* therefore is not prior art to the current application. Applicants therefore request withdrawal of the invention.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

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